Border Briefing:

Working Together to Protect Human Health and the Environment in El Paso, Texas; Sunland Park, NM; and Ciudad Juarez, Chihuahua, Mexico

U.S. EPA REGION 6

Background: Border 2012 Program

In April 2003, the governments of Mexico and the United Status and of all the border states and tribes adopted the **"Border 2012 U.S.-Mexico Environmental Program."** Border 2012 succeeded the earlier "Border XXI Program" by launching a more bottom up approach dedicated to protecting the environment and public health in the border region with the principles of sustainable development.

The 400 year old binational community of El Paso and Ciudad Juarez, with about 2 million citizens combined, is centrally located along the border of the United States and Mexico. Located in the "Paso del Norte," it sits in the basin between the Franklin Mountains in the U.S. and the Sierras de Juarez in Mexico. It has a storied history of shared cultural and economic partnership, and more recently has been a leader in binational cooperation in environmental protection.

Sister Cities' Emergency Communication Agreement (MOU)

A critical element of the U.S.-Mexico border 2012 program is the development of sister city partnerships between municipalities in the United States and Mexico. Sister cities are building confidence along the US. – Mexico border by planning to help each other where there is an emergency on either side of the border.

Plans call for police, fire, paramedics, and other emergency response personnel from both sides of the border to respond quickly to large fires, dangerous chemical spills, or other emergencies. The plans also address preparedness issues including: hazard identification; pollution prevention; risk reduction; training; exercises; and equipment. The first sister city emergency plan was signed in 1997 between Brownsville, Texas Matamoros, Tamaulipas Mexico. Currently, there are 13 out of the 14 contingency plans signed to ensure adequate response for large-scale emergencies.

Background on El Paso - Cd Juarez—Sunland Park MOU

Language, commitments and clause for addendum on the agreement between these three communities began last August 2006, with meetings lead and convened by local stakeholders from each of the cities. In addition, representatives from federal and state agencies (i.e. U.S.EPA, SEMARNAT, TCEQ, NMED, BECC, IBWC, CILA, U.S. & Mexican Consulates) have assisted these meetings. When a consent version was reached (mirror image) in both languages, each of the three cities' legal council reviewed it and introduced for approval at an official city council session. All of the three city council members voted unanimously in support of the Mayor's initiative for binational coordination of cooperation for protecting the environment, the public and community infrastructure in case of an emergency due to Hazardous Materials exposure.

MOU Components:

- Creates a Bi-national Task Force develop joint emergency preparedness strategies and a plan
- Develop a Bi-national Emergency Communication & Notification Plan
- Exchange of information on hazardous waste to identify threats to the region.

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Sister Cities' Emergency Communication Agreement *cont'd*

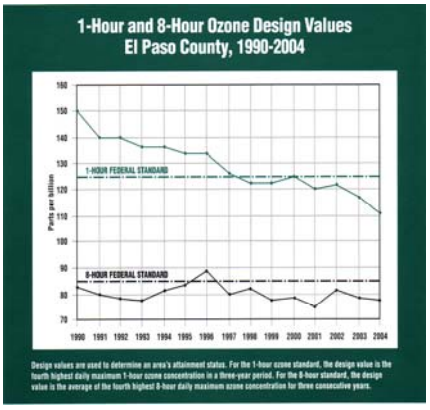
Suggested Talking Points: Although, this may be the last of the Sister City Agreements along the border to be put into action, it is just the latest jewel in the crown of bi-national cooperation on the environment in the Paso del Norte Region.

Future Challenges:

- Local officials will need to ensure and maintain effectiveness of the plan
- Local responders on both sides of the border need to be trained with the necessary knowledge and skills to efficiently and effectively deal with all environmental or natural hazards that could occur.
- The challenge of sufficient funding to ensure that not only U.S. responders are equipped but our Mexican partners are well.
- Finding solutions to the challenges that would be faced in the event an actual response would require a border crossing, such as how to request aid for a response, permission for border crossings, liability insurance for responders and contractors, security and I.D. issues for responders and contractors.
- Communication: frequencies used by responders is different in both countries.

Air Quality Improvement in the Paso del Norte Air shed

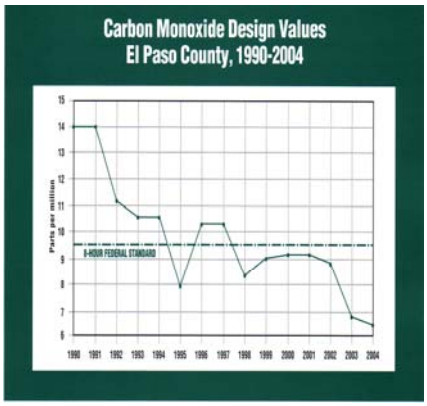
With the 1990 Clean Air Act, El Paso was designated as non-attainment for ozone, carbon monoxide and course particulates (PM10), the only Texas City failing to meet the standard for three pollutants. Further, Section 179B of the Clean Air Act granted El Paso a "pass" from additional sanctions upon demonstrating that attainment would be achieved were it not for emissions from Mexico contributing the violations of the standards.



Today, rather than relying on the "pass" from additional sanctions, El Paso stands as the first Texas city to turn around its air quality profile. El Paso complies with both the ozone standard and the carbon monoxide standard; and is making steady progress towards meeting the PM10 standard. This success is a credit to the bi-national communities working together through the Joint Advisory Commission (JAC) and other mechanisms to improve air quality.

Through local leadership and planning efforts of the JAC and state and local governments, Texas, New Mexico and Chihuahua have adopted numerous air quality improvement measures. Examples of successful bi-national cooperation include:

- Creation of a Dedicated Commuter Land between El Paso and Juarez
- Adoption of vehicle inspection and maintenance programs including the recent introduction of remote sensing technologies in Juarez to identify high emitting vehicles.
- Wintertime use of oxygenated fuels on both sides of the border



to decrease CO formation.

- Adoption in Juarez of Mexico's first "ProAire" (similar to U.S. State Implementation Plan) . Presented by President Zedillo in 19XX
- Numerous innovative projects such as the cross-border pollutant trading allowed under Texas state law whereby, El Paso Electric Company met its pollution reduction obligation by replacing brick kilns in Mexico with new kilns developed with the help of EPA grants to reduce pollutants by over 70%.

Preserving the Land—Focus on Waste Tires

Waste tires present a challenge in communities all along the border region. Tires pile up due to the age of old cars moving from the United States to Mexico, the associated robust market for cheaper used tires, and the general lack of tire management systems. For example, Texas largely avoids the problem of waste tires by incorporating of crumbed tire in asphalt used for road paving. Road paving is still a challenge in Mexico.

Tires present several potential threats including the risk of massive fires and as breeding grounds for disease spreading mosquitoes. Ciudad Juarez has been home to the largest tire pile in the entire border region with over 5 million tires. Recently, through the collaborative efforts of both the United States and Mexico, including the state government of Chihuahua and the city government of Juarez, a significant dent is being made in that tire pile.

Cd. Juarez Scrap Tire Pile

In the past two years, over 1.5 million tires have been removed to be used in a nearby modern cement kiln as tire-derived-fuel. This achievement results from building local partnerships and commitments to leverage funds and in-kind services. In addition to $60K EPA seed money, all three levels of the Mexican government contributed in the following amounts:

- SEMARNAT = $60,000
- Chihuahua State = $40,000
- Ciudad Juarez = $30,000

These funds help pay for the collection and transport of tires to the cement kiln west of the city.

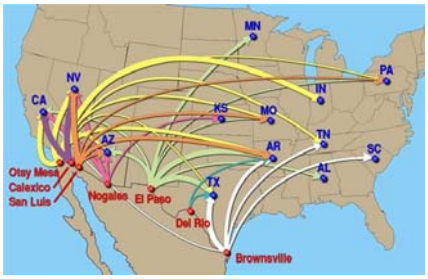
Cd. Juarez Scrap Tire Pile (up-close)

Ysleta del Sur Pueblo Tribe:

The Ysleta del Sur Pueblo Tribe is one of two Tribes within Region 6 that participates in the U.S.—Mexico Border 2012 Program. Some of the work the Tribe has been concentrating their efforts pertains to addressing improving public health thru air quality studies, exploring alternative sources of fuel and education. **"Pehla Funi (Black Water)" DVD:** Through an EPA Region 6 Border 2012 Program Grant awarded to the Ysleta del Sur Pueblo Tribe for $25,000. The Tribe produced a successful and effective environmental education English & Spanish video, title "Pehla Funa (Black Water)", for Native American Indian Tribes and Mexican indigenous peoples along the U.S.-Mexico border. The video emphasizes the importance of proper use, disposal, recycling of household hazardous wastes and automotive products. Tribe produced over 200 DVD copies, that have already been distributed throughout the U.S.-Mexico Border to various Native American Tribes. The video has been well received and praised as an effective tool for helping communities understand this very important issue which is a problem in these communities.

Air Grant: Through an EPA Region 6 US/Mexico Border Air Quality Program Grant awarded to the Ysleta del Sur Pueblo Tribe for $180,967, the Tribe is developing and conducting a demonstration project for Tribal service fleet vehicles using biodiesel produced from waste vegetable oil (WVO) obtained by local sources/ suppliers. Additionally, the tribe has performed numerous educational and outreach activities, including the developing their own informative brochures. The tribe has conducting various engine tests to ensure the fuel is ready for operation, and are currently looking into coordinating with a local University for further testing assistance.

Radio Frequency Identification (RFID) Tracking of Hazardous Wastes Across International Borders



Truck Routes leaving Port of Entry

Thousands of tons of hazardous wastes are imported into the U.S. from Mexico each year. The project will demonstrate the use of radiofrequency identification (RFID) technology to enhance tracking of chemicals and hazardous wastes in transit. This project supports EPA's bilateral and trilateral trade agreements relating to the international shipment of hazardous wastes (i.e. Border 2012 Agreement between the U.S. and Mexico; Smart Border Accord with Canada; trilateral environmental agreement under NAFTA).

The project will determine if an RFID reader can gather, process, and transmit information about the location of the tagged hazardous waste as it moves from one site to another, increasing visibility and control of these shipments and collection of data of hazardous waste import/ export that could potentially pose a threat to the environment or public.

The This program is being carried out under EPA's Environmental and Sustainable Technology Evaluation (ESTE)/ Environmental Technology Verification (ETV) Program. EPA's Region 6 and particularly the El Paso Field Office will essentially lead the field testing portion of the pilot, along with the Texas Commission on Environmental Quality. There we will test the movement of a very limited number of hazardous waste shipments from a maquiladora facility near the border into a hazardous waste receiving facility in Texas.

Truck leaving Port of Entry

Water Quality and Infrastructure

El Paso, Texas Water Desalination Facility: In September of 2007 a new water desalination facility is scheduled to begin operation for the purpose of providing safe drinking water to the City of El Paso and Fort Bliss, Texas. This facility will be the largest inland desalination plant in the world. Partial funding was provided through congressional appropriated grants totaling $26.2 million, and administered by the Region 6 Office of the Environmental Protection Agency. This desalination plant will provide 28 million gallons of drinking water per day from the brackish waters of the Hueco - Bolson aquifer. Treatment and use of the brackish water will help protect and extent the life of the existing fresh water resources in the El Paso border area.

3-D Graphic Image of Future Desalination Plant

Anapra, Chihuahua, Mexico Wastewater Treatment: Due to the natural configuration of the Anapra, Chihuahua area, immediately across the border from Sunland Park, NM; runoff water flows from Mexico to the United States. The residents of Anapra currently dispose their wastewater to saturated latrines or directly to the surface creating a serious health hazard for both the U.S. and Mexico. The purpose of this project is to construct a wastewater collection and treatment system designed to eliminate pollution caused by untreated wastewater discharges while helping to prevent the proliferation of illnesses associated with inadequate sanitation facilities. U.S. financial support for the project is through an EPA Border Environmental Infrastructure Fund (BEIF) grant totaling $1.6 million.